



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,671	01/29/2004	Stephen Gerard Nikodem	21666-1	5421
7590	06/08/2006		EXAMINER	
John S. Beulick Armstrong Teasdale LLP Suite 2600 One Metropolitan Square St. Louis, MO 63102			BUMGARNER, MELBA N	
			ART UNIT	PAPER NUMBER
			3732	
DATE MAILED: 06/08/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/767,671	NIKODEM, STEPHEN GERARD	
	Examiner	Art Unit	
	Melba Bumgarner	3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 March 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,2 and 4-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,2 and 4-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
2. Claims 1, 2, and 4-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Recitation of “said body comprising a substantially planar surface” is not disclosed in the specification nor shown in the drawings.

Claim Objections

3. Claim 13 is objected to because of the following informalities: the body is no longer unbraided to remain unbraided. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4-6, 8, 11-13, 16, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Walshein (4,256,456). Wallshein discloses an apparatus comprising a wire (figure 11) comprising a first end, a second end and a substantially planar body extending therebetween,

Art Unit: 3732

the body comprising a substantially planar surface, the first end configured to couple to a tooth that is at least partially impacted (column 2 line 48), the second end configured to secure the apparatus relative to the tooth, such that the wire applies substantially continuous force to the tooth. The body comprises at least one eyelet 32 formed between the first and second end. The body is sinusoidal shaped. The first end is configured to couple to the tooth without circumscribing the tooth. The apparatus has a substantially uniform thickness between the ends. The body comprises a spring extending between the first and second ends. Wallshein shows a method for treating a tooth that is at least partially impacted comprising the steps as claimed with the second end coupled to adjacent tooth anchoring the apparatus.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1, 2, 4-6, 8, 9, 11-13, and 16-18 are rejected as understood under 35 U.S.C. 103(a) as being unpatentable over Schachter (3,127,677) in view of Tracey (5,246,366). Schachter discloses an apparatus comprising a wire comprising a first end, a second end and a substantially planar body extending therebetween, the first and second ends, the first end configured to couple to a tooth that is at least partially impacted 30, the second end configured to secure the apparatus relative to the tooth, the wire applies a substantially continuous force to the tooth (column 1 line 31); however, Schachter does not show what is understood to be the body comprising a substantially planar surface. Tracey teaches an example of an orthodontic apparatus comprising

Art Unit: 3732

a body comprising a substantially planar surface (column 4 line 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the substantially planar surface of Tracey as understood to mean the cross-sectional shape of the body in order to easily handle and conform the apparatus. The body is sinusoidal shaped. It would have been obvious to one of ordinary skill in the art to have the wire form an eyelet between the first and second ends as the eyelet is one of many embodiments of the claimed invention and is not critical to the invention. The first end is capable of coupling to the tooth without circumscribing the tooth. The apparatus has a substantially uniform thickness between the ends. It would have been obvious to one of ordinary skill in the art to call the wire of Schachter a spring as it is similar to embodiment of figure 4. The apparatus further comprises an orthodontic fixture configured to be secured against an external surface of the tooth 8''. Schachter discloses a method of using the apparatus as claimed and the wire second end coupled to an anchoring device 6''.

8. Claims 7, 10, 14, and 15 are rejected as understood under 35 U.S.C. 103(a) as being unpatentable over Wallshein in view of Sachdeva et al. Wallshein discloses an apparatus that shows the limitations as described above; however, Wallshein does not show the wire fabricated from a superelastic material or shaped memory alloy. Sachdeva et al. teach an orthodontic wire which applies a continuous force to the tooth comprising superelastic or shaped memory alloy. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Wallshein with the wire of superelastic material of Sachdeva et al. in order to use a force supplying wire that can be easily shaped or manipulated for placement by the practitioner in view of Sachdeva et al.

Art Unit: 3732

9. Claims 7, 10, 14, and 15 are rejected as understood under 35 U.S.C. 103(a) as being unpatentable over Schachter in view of Sachdeva et al. Schachter discloses an apparatus that shows the limitations as described above; however, Schachter does not show the wire fabricated from a superelastic material or shaped memory alloy. Sachdeva et al. teach an orthodontic wire which applies a continuous force to the tooth comprising superelastic or shaped memory alloy. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Schachter with the wire of superelastic material of Sachdeva et al. in order to use a force supplying wire that can be easily shaped or manipulated for placement by the practitioner in view of Sachdeva et al.

Response to Arguments

10. Applicant's arguments with respect to the rejected claims have been considered but are moot in view of the new ground(s) of rejection. Applicant argues on pages 7 and 8, “[r]ather, in contrast to the present invention, Ziegler described a ligation chain that includes an annular cross-sectional shape and therefore does not include a substantially planar surface.” However, the specification and the drawings do not describe the cross-sectional shape of the body of the inventive apparatus. It is the teaching of the material of the apparatus of Sachdeva et al. that is combined. Sachdeva et al. teaches use of superelastic or shape-memory alloy in orthodontic appliances as compared to material such as stainless steel which is well known in the art.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3732

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melba Bumgarner whose telephone number is 571-272-4709. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached at 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Melba Bumgarner
Primary Examiner